

CONTENTS OF VOLUME 45

No. 1, Spring 1978

I. Screening and the noninvasive evaluation of patients with coronary artery disease

Utility of conventional risk factors in evaluation of patients with coronary disease

William B. Kannel, M.D., and P. Sorlie, M.D. 1

Can we reverse or retard an obstructive coronary lesion by risk factor intervention?

Eliot Corday, M.D. 5

Exercise testing: electrocardiography and radionuclide cineangiography

Jeffrey S. Borer, M.D. 9

Stress testing in the evaluation of patients suspected of having coronary heart disease

Myrvin H. Ellestad, M.D. 11

Myocardial scintigraphy in coronary artery disease

Elias H. Botwinick, M.D., David Shames, M.D., and William W. Parmley, M.D. 13

Echocardiography in patients with coronary artery disease

Harvey Feigenbaum, M.D. 17

II. Invasive techniques and their limitations

Pitfalls in the angiographic diagnosis of coronary artery disease

Earl K. Shirey, M.D. 19

Complications of coronary arteriography and left heart catheterization

F. Mason Sones, Jr., M.D. 21

Assessment of left ventricular function

Shahbuddin H. Rahimtoola, M.D. 24

III. Preoperative and operative management

Management of anesthesia for coronary artery surgery

F. George Estafanous, M.D. 29

Ventilatory management

Demetrios G. Lappas, M.D. 37

Hemodynamic consequences of hemodilution

Arthur S. Keats, M.D. 39

Blood usage in open heart surgery

Alfred J. Tector, M.D. 42

Choice of grafts

George E. Green, M.D. 44

Choice of grafts—criteria for selection of coronary bypass conduit

Alexander S. Geha, M.D. 46

Postoperative care

Daniel J. Ullerot, M.D. 50

Hemodynamic considerations in the postoperative management of the cardiovascular surgical patient

Richard O. Russell, Jr., M.D., Nicholas T. Kouchoukos, M.D., and Robert B. Karp, M.D. 54

IV. Myocardial preservation	
Myocardial preservation	<i>Burton E. Sobel, M.D.</i> 61
Hypothermia and anoxic arrest	<i>Nicholas T. Kouchoukos, M.D.</i> 66
Myocardial preservation by topical hypothermia	<i>Edward B. Stinson, M.D.</i> 70
Intra-aortic balloon pumping in the management of patients with coronary artery disease	<i>Mortimer J. Buckley, M.D.</i> 72
Pulsatile flow for improved myocardial protection	<i>David Bregman, M.D.</i> 76
V. Surgical techniques	
Technical considerations in coronary bypass operations	<i>Denton A. Cooley, M.D.</i> 79
Superiority of the internal mammary artery as a coronary bypass graft	<i>John L. Ochsner, M.D.</i> 81
Surgical techniques	
<i>Ch. Hahn, M.D., Ninoslav Radovanovic, M.D., Martin Schmuziger, M.D., E. Hauf, M.D., and B. Faidutti, M.D.</i>	83
Early and long-term results of combined endarterectomy and bypass grafting	<i>Magdi H. Yacoub, M.D.</i> 90
Operative technique	<i>Adib D. Jatene, M.D.</i> 94
Technique and results with side-to-side anastomoses	<i>William H. Sewell, M.D., and Karlene V. Sewell, B.A.</i> 98
Operative technique for coronary bypass surgery	
<i>Floyd D. Loop, M.D., Paul C. Taylor, M.D., Laurence K. Groves, M.D., Leonard A. Golding, M.D., Delos M. Cosgrove, M.D., and Manuel J. Irarrazaval, M.D.</i>	101
Techniques in coronary artery grafting; septal artery revascularization and graft patency in jump grafts	
<i>F. E. E. Vermeulen, M.D., H. Huysmans, M.D., P. Knaepen, M.D., R. de Geest, M.D., J. Ernst, M.D., and Albert V. G. Bruschke, M.D.</i>	103
VI. Outcome of revascularization surgery for coronary artery disease	
Factors influencing graft patency	<i>Claude M. Grondin, M.D.</i> 107
Factors influencing patency of coronary bypass grafts	<i>William C. Sheldon, M.D.</i> 109
Global and regional myocardial metabolism before and after successful aortocoronary artery bypass surgery	<i>Kanu Chatterjee, M.D.</i> 112
Postoperative assessment of left ventricular function	<i>Jack C. Manley, M.D.</i> 116
Preoperative and postoperative stress evaluation in the assessment of coronary artery bypass graft surgery	<i>Ezra A. Amsterdam, M.D., and Dean T. Mason, M.D.</i> 121

VII. Revascularization in the more complex clinical situation

Combined valve replacement or valvulotomy and bypass graft surgery <i>Pierre Grondin, M.D., P. Donzeau-Gouge, M.D., O. Bical, M.D., and Jean Georges Kretz, M.D.</i>	123
Management of coexistent carotid and coronary artery occlusive atherosclerosis <i>George C. Morris, Jr., M.D., Coyness L. Ennix, Jr., M.D., Gerald M. Lawrie, M.D., E. S. Crawford, M.D., and J. F. Howell, M.D.</i>	125
Management of concomitant coronary and carotid artery obstructive disease <i>Harold C. Urschel, Jr., M.D.</i>	128
Ventricular aneurysms and akinesis <i>Denton A. Cooley, M.D.</i>	130
Ventricular aneurysms and akinesis <i>Ramiro Rivera, M.D., and Juan Luis Delcan, M.D.</i>	133
Reoperation for myocardial revascularization <i>Quentin R. Stiles, M.D.</i>	136
Reoperative myocardial revascularization <i>Floyd D. Loop, M.D., Manuel J. Irarrazaval, M.D., Delos M. Cosgrove, M.D., Paul C. Taylor, M.D., Laurence K. Groves, M.D., and Leonard A. Golding, M.D.</i>	139

VIII. Natural history of patients not treated surgically

Minor prognostic associations <i>William L. Proudfoot, M.D.</i>	141
Ten-year follow-up of 601 nonsurgical cases of angiographically documented coronary disease; angiographic correlations <i>Albert V. G. Bruschke, M.D.</i>	143
Prognosis in coronary artery disease; arteriographic, ventriculographic, and hemodynamic factors <i>John O. Parker, M.D.</i>	145
Risk factors in relation to prognosis <i>Albert Oberman, M.D., and James C. Baldone, M.S.</i>	147
Coronary arteriography and ventriculography in survivors of acute myocardial infarction <i>J. O'Neal Humphries, M.D., Bertram Pitt, M.D., Robert A. Schultze, Jr., M.D., Lawrence S. C. Griffith, M.D., S. C. Achuff, M.D., M. Baird, M.D., and G. Taylor, M.D.</i>	151
Natural history of coronary artery disease based on coronary angiography; a critical review <i>Paul R. Lichtlen, M.D.</i>	153

IX. Long-term outcome of patients treated surgically

Survival following bypass graft surgery <i>Edwin L. Alderman, M.D., Christopher R. Brown, M.D., Gary R. Sanders, M.D., and Edward B. Stinson, M.D.</i>	157
Survival following aortocoronary bypass graft surgery <i>Lucien Campeau, M.D.</i>	160

Long-term follow-up after coronary artery bypass	
<i>Robert J. Hall, M.D., Efrain Garcia, M.D., Virendra S. Mathur, M.D., Ulrich Busch, M.D., Denton A. Cooley, M.D., Kenneth A. Gold, M.D., and Albert G. Gray, Ph.D.</i>	162
Effect of bypass graft surgery on survival; a 6- to 10-year follow-up study of 741 patients	
<i>William C. Sheldon, M.D.</i>	166
Survival following myocardial revascularization; an analysis at 8 years	
<i>John A. Walker, M.D.</i>	169
Perioperative myocardial infarction after coronary bypass surgery	
<i>Albert Oberman, M.D., Nicholas T. Kouchoukos, M.D., Y. N. Makar, M.D., Richard O. Russell, Jr., M.D., L. T. Sheffield, M.D., M. Ray, M.S., R. E. Allen, P.A., and J. R. Kitts, P.A.</i>	172
Progression of coronary disease 5 to 7 years after aortocoronary bypass surgery	
<i>Martial G. Bourassa, M.D., Jacques Lesperance, M.D., F. Corbara, M.D., J. Saltiel, M.D., and Lucein Campeau, M.D.</i>	175
Contributing factors preventing return to work of cardiac surgery patients	
<i>Paul David, M.D.</i>	177
X. Selection of patients for myocardial revascularization	
The bad left ventricle	
<i>Martial G. Bourassa, M.D.</i>	179
Selection of patients for emergency coronary revascularization	
<i>Lawrence H. Cohn, M.D.</i>	181
Unstable angina—experience with surgical therapy in the subset of patients having preinfarction angina	
<i>Jack M. Matloff, M.D., Aurelio Chaux, M.D., and Hector Sustaita, M.D.</i>	184
XI. Summary of conference and definition of future needs	
Summary of conference	
<i>René G. Favaloro, M.D.</i>	189
No. 2, Summer 1978	
Quantitative cutaneous sensory testing in children and adolescents	
<i>John P. Conomy, M.D., Karen L. Barnes, Ph.D., and Robert P. Cruse, D.O.</i>	197
Tourette syndrome; a childhood disorder	
<i>Gerald Erenberg, M.D., and A. David Rothner, M.D.</i>	207
Craniosynostosis and related syndromes; pathogenesis and treatment	
<i>Joseph F. Hahn, M.D., and John A. Jane, M.D.</i>	213
Computed tomographic findings in childhood hemiplegia	
<i>A. David Rothner, M.D., Robert P. Cruse, D.O., Samuel J. Horwitz, M.D., Meredith A. Weinstein, M.D., and Paul M. Duchesneau, M.D.</i>	219
Comment	
A critique of the VA cooperative study	
<i>William C. Sheldon, M.D., Floyd D. Loop, M.D., and William L. Proudfit, M.D.</i>	225

Surgical Technique

The mesenteric sling technique; new method of constructing an intestinal nipple valve for the continent ileostomy

Les Bokey, M.B., B.S., F.R.A.C.S., and Victor W. Fazio, M.D. 231

Case Reports

The Cobb syndrome; association with hereditary cutaneous hemangiomas

Robert D. Mercer, M.D., A. David Rothner, M.D., Sebastian A. Cook, M.D., and Ralph J. Alfidi, M.D. 237

Post-transfusion purpura

Gholam H. Faroody, M.D., John D. Clough, M.D., and George C. Hoffman, M.B., B. Chir., F.R.C.Path. 241

Acute ophthalmoplegia, ataxia, and areflexia (Fisher syndrome) in childhood

Ronald L. Price, M.D., Patrick S. O'Connor, M.D., and A. David Rothner, M.D. 247

No. 3, Fall 1978

Atherosclerosis—an epilogue

Lena A. Lewis, Ph.D. 253

The potential value of red cell transketolase in the metabolic evaluation of disease

Derrick Lonsdale, M.D., and Raymond J. Shamberger, Ph.D. 267

Evaluation of intracranial space-occupying lesions by computed tomography and electroencephalography; a comparison

Antonio Culebras, M.D., Charles E. Henry, Ph.D., and Guy H. Williams, Jr., M.D. 275

Case Reports

Aplastic anemia; effect of antithymocyte globulin on erythroid colony formation

Susan A. Rothmann Hamburger, Ph.D., James H. Finke, Ph.D., Dennis L. Laffay, M.D., Ronald M. Bukowski, M.D., James S. Hewlett, M.D., and George C. Hoffman, M.B., B. Chir., F.R.C. Path. 281

Delayed calyceal cutaneous fistula after renal transplantation

Luay P. Susan, M.D., James D. Daughtry, M.D., William E. Braun, M.D., Lynn H. Banowsky, M.D., Ralph A. Straffon, M.D., and Rafael Valenzuela, M.D. 287

No. 4, Winter 1978

Natural history of obstructive coronary artery disease; supplement to a 10-year study

William L. Proudfoot, M.D., Albert V. G. Bruschke, M.D., and F. Mason Sones, Jr., M.D. 293

Management of hypertensive emergencies

Donald G. Vida, M.D., and Ray W. Gifford, Jr., M.D. 299

Serum prolactin levels in hypothyroidism

Leslie R. Sheeler, M.D., Manjula S. Kumar, Ph.D., and O. Peter Schumacher, M.D., Ph.D. 307

First Annual Irvine H. Page Lecture; A Page in the story of hypertension

Julius H. Comroe, Jr., M.D. 311

Case Report

Anterior decompression for progressive brain stem compression in the Klippel-Feil syndrome; a case report

Guy Sava, M.D., Donald F. Dohn, M.D., and A. David Rothner, M.D. 325

CLEVELAND CLINIC QUARTERLY—VOLUME 45, 1978
AUTHOR INDEX

Achuff SC, 151
Alderman EL, 157
Alfidi RJ, 237
Allen RE, 172
Amsterdam EA, 121

Baird M, 151
Baldone JC, 147
Banowsky LH, 287
Barnes KL, 197
Bical O, 123
Bokey L, 231
Borer JS, 9
Botvinick EH, 13
Bourassa MG, 175, 179
Braun WE, 287
Bregman D, 76
Brown CR, 157
Bruschke AVG, 103, 143, 293
Buckley MJ, 72
Bukowski RM, 281
Busch U, 162

Campeau L, 160, 175
Chatterjee K, 112
Chaux A, 184
Clough JD, 241
Cohn LH, 181
Comroe JH Jr, 311
Cconomy JP, 197
Cook SA, 237
Cooley DA, 79, 130, 162
Corbara F, 175
Corday E, 5
Cosgrove DM, 101, 139
Crawford ES, 125
Cruse RP, 197, 219
Culebras A, 275

Daughtry JD, 287
David P, 177
de Gees R, 103
Delcan JL, 133
Dohn DF, 325
Donzeau-Gouge P, 123
Duchesneau PM, 219

Ellestad MH, 11
Ennix CL Jr, 125
Erenberg G, 207
Ernst J, 103
Estafanous FG, 29

Faidutti B, 83
Farboody GH, 241
Favaloro RG, 189
Fazio VW, 231
Feigenbaum H, 17
Finke JH, 281

Garcia E, 162
Geha AS, 46
Gifford RW Jr, 299
Gold KA, 162
Golding LA, 101, 139
Gray AG, 162
Green GE, 44
Griffith LSC, 151
Grondin CM, 107
Grondin P, 123
Groves LK, 101, 139

Hahn C, 83
Hahn JF, 213
Hall RJ, 162
Hamburger SAR, 281
Hauf E, 83
Henry CE, 275
Hewlett JS, 281
Hoffman GC, 241, 281
Horwitz SJ, 219
Howell JF, 125
Humphries JO, 151
Huysmans H, 103

Irarrazaval MJ, 101, 139

Jane JA, 213
Jatene AD, 94

Kannel WB, 1
Karp RB, 54
Keats AS, 39
Kitts JR, 172
Knaepen P, 103
Kouchoukos NT, 54, 66, 172
Kretz JG, 123
Kumar MS, 307

Laffay DL, 281
Lappas DG, 37
Lawrie GM, 125
Lesperance J, 175
Lewis LA, 253
Lichtlen PR, 153

Lonsdale D, 267
Loop FD, 101, 139, 225

Makar YN, 172
Manley JC, 116
Mason DT, 121
Mathur VS, 162
Matloff JM, 184
Mercer RD, 237
Morris GC Jr, 125

Oberman A, 147, 172
Ochsner JL, 81
O'Connor PS, 247

Parker JO, 145
Parmley WW, 13
Pitt B, 151
Price RL, 247
Proudfit WL, 141, 225, 293

Radovanovic N, 83
Rahimtoola SH, 24
Ray M, 172
Rivera R, 133
Rothner AD, 207, 219, 237, 247, 325
Russell RO Jr, 54, 172

Saitiel J, 175
Sanders GR, 157
Sava GM, 325
Schmuziger M, 83
Schulze RA Jr, 151
Schumacher OP, 307
Sewell KV, 98
Sewell WH, 98
Shamberger RJ, 267
Shames D, 13
Sheeler LR, 307
Sheffield LT, 172
Sheldon WC, 109, 166, 225
Shirey EK, 19
Sobel BE, 61
Sones FM Jr, 21, 293
Sorlie P, 1
Stiles QR, 136
Stinson EB, 70, 157
Straffon RA, 287
Susan LP, 287
Sustaita H, 184

Taylor G, 151

Taylor PC, 101, 139

Tector AJ, 42

Ulliyot DJ, 50

Urschel HC Jr, 128

Valenzuela R, 287

Vermeulen FEE, 103

Vidt DG, 299

Walker JA, 169

Weinstein MA, 219

Williams GH Jr, 275

Yacoub MH, 90

CLEVELAND CLINIC QUARTERLY—VOLUME 45, 1978
SUBJECT INDEX

ANEMIA, APLASTIC. Aplastic anemia; effect of antithymocyte globulin on erythroid colony formation, 281

ANGINA PECTORIS. Critique of the VA cooperative study, 225

ARTERIOVENOUS MALFORMATION, SPINAL CORD. Cobb syndrome, 237

ATHEROSCLEROSIS. Atherosclerosis—an epilogue, 253

COBB SYNDROME. Cobb syndrome, 237

COMPUTED TOMOGRAPHY. Computed tomographic findings in childhood hemiplegia, 219
Evaluation of intracranial space-occupying lesions by computed tomography and electroencephalography, 275

CORONARY ARTERY DISEASE. Invasive techniques and their limitations, 19, 21, 24
Long-term outcome of patients treated surgically, 157, 160, 162, 166, 169, 172, 175, 177
Myocardial preservation, 61, 66, 70, 72, 76
Natural history of obstructive coronary artery disease; supplement to a 10-year study, 293
Natural history of patients not treated surgically, 141, 143, 145, 147, 151, 153
Outcome of revascularization surgery for coronary artery disease, 107, 109, 112, 116, 121
Preoperative and operative management, 29, 37, 39, 42, 44, 46, 50, 54
Revascularization in the more complex clinical situation, 123, 125, 128, 130, 133, 136, 139
Screening and the noninvasive evaluation of patients with coronary artery disease, 1, 5, 9, 11, 13, 17
Selection of patients for myocardial revascularization, 179, 181, 184
Summary of conference and definition of future needs, 189
Surgical techniques, 79, 81, 83, 90, 94, 98, 101, 103

CRANIOSYNOSTOSIS. Craniosynostosis and related syndromes, 213

ENZYMES. Potential value of red cell transketolase in the metabolic evaluation of disease, 267

FISHER SYNDROME. Acute ophthalmoplegia, ataxia, and areflexia (Fisher syndrome) in childhood, 247

HEMIPLEGIA. Computed tomographic findings in childhood hemiplegia, 219

HYPERTENSION. First Annual Irvine H. Page Lecture, 311
Management of hypertensive emergencies, 299

HYPOTHYROIDISM. Serum prolactin levels in hypothyroidism, 307

ILEOSTOMY. Mesenteric sling technique, 231

KLIPPEL-FEIL SYNDROME. Anterior decompression for progressive brain stem compression in the Klippel-Feil syndrome, 325

PURPURA. Post-transfusion purpura, 241

SENSORY TESTING. Quantitative cutaneous sensory testing in children and adolescents, 197

TOURETTE SYNDROME. Tourette syndrome; a childhood disorder, 207

TRANSKETOLASE. Potential value of red cell transketolase in the metabolic evaluation of disease, 267

TRANSPLANTATION, RENAL. Delayed calyceal cutaneous fistula after renal transplantation, 287

